

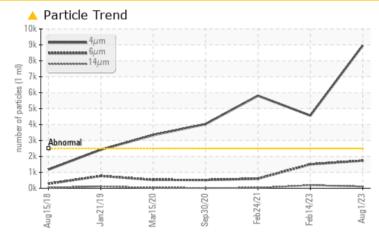
PROBLEM SUMMARY

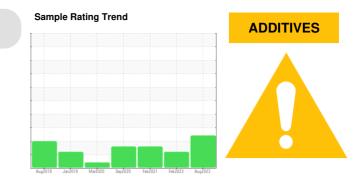
Area 076 G1 [2697536] Machine Id B-9002 Blower (S/N LR97-639) Component

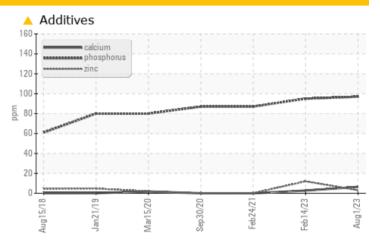
Blower Fluid

SHELL CORENA P 100 (12 GAL)

COMPONENT CONDITION SUMMARY







RECOMMENDATION

Confirm oil reference for machine. No other action required at this time. Resample at next normal interval.

PROBLEMATIC TEST RESULTS

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Sample Status				ABNORMAL	ABNORMAL	ABNORMAL
Calcium	ppm	ASTM D5185m	60	<u> </u>	<u> </u>	<u> </u>
Zinc	ppm	ASTM D5185m	190	<u> </u>	1 2	0
Sulfur	ppm	ASTM D5185m	1300	<u> </u>	<u> </u>	1 20
Particles >4µm		ASTM D7647	>2500	<u> </u>	4564	5808
Particles >6µm		ASTM D7647	>640	<u> </u>	1501	601
Oil Cleanliness		ISO 4406 (c)	>18/16/13	<u> </u>	19/18/15	20/16/12

Customer Id: HEXGEI Sample No.: PLS0000670 Lab Number: 05935314 Test Package: IND 2



To manage this report scan the QR code

To discuss the diagnosis or test data: Mike Johnson +1 (615)771-6030 mike.johnson@amrri.com

To change component or sample information: Customer Service +1 1-800-237-1369 customerservice@wearcheck.com

RECOMMENDED ACTIONS

There are no recommended actions for this sample.

HISTORICAL DIAGNOSIS

14 Feb 2023 Diag: Mike Johnson



Confirm oil reference for machine. No other action required at this time. Resample at next normal interval.Wear particles are low and acceptable. Contamination is on par with new unfiltered oil. Fluid health indicators do not match the reference oil, but are steady compared to previous samples.

24 Feb 2021 Diag: Mike Johnson



Sample at next normal interval. The wear debris level

Sample at next normal interval. The wear debris levels in this sample are low and appropriate. The PQ value, which reflects larger ferromagnetic particles, is slightly elevated. There is no indication of lubricant health problems in this sample. The fluid is acceptable for continued use. There is no indication of lubricant health problems in this sample. The fluid is acceptable for continued use. Without a reference sample it is particularly difficult to make a judgement call about the relative health of the fluid.

30 Sep 2020 Diag: Mike Johnson

ADDITIVES



No other corrective actions. Sample at the regular intervalWear rate is low and steady. Particulate levels are typical for new oil from the drum. Filter is possible. Additive levels are not consistent with Corena P 100 fluid, but additives levels are steady, and the fluid properties suggest the oil is acceptable for continued use.



view report

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Report Id: HEXGEI [WUSCAR] 05935314 (Generated: 08/28/2023 12:54:49) Rev: 1



OIL ANALYSIS REPORT

Area 076 G1 [2697536] Machine Id B-9002 Blower (S/N LR97-639) Component

Blower

Fluid SHELL CORENA P 100 (12 GAL)

DIAGNOSIS

Recommendation

Confirm oil reference for machine. No other action required at this time. Resample at next normal interval.

Wear

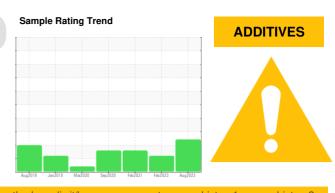
Wear particles are low and acceptable.

Contamination

Contamination is on par with new unfiltered oil. Filtration can help extend machine life.

Fluid Condition

Fluid health indicators do not match the reference oil, but are steady compared to previous samples.

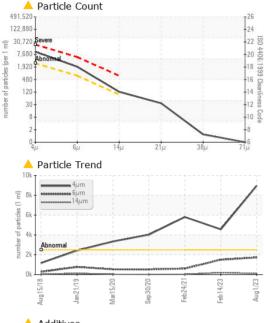


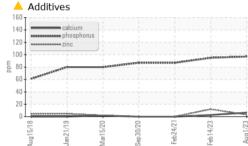
Sample NumberClient InfoPLS0000670PLS0000547PLS0000347PLS0000347PLS0000347Sample DatevrsClient Info340Machine AgeyrsClient Info340Oil AgeyrsClient Info118Oil ChangedvrsClient InfoNot ChangedN/ASample StatusvrsClient InfoABNORMALABNORMALABNORMALVEAR METALSmethodlimitbasecurrenthistory1history2PQASTM D8168>20<1<12ChromiumppmASTM D51858>20<000NickelppmASTM D51858>20000NickelppmASTM D51858>20000NickelppmASTM D51858>20000NickelppmASTM D51858>20000CopperppmASTM D51858>20<1<11NimonyppmASTM D51858>20<1<10AntimonyppmASTM D51858>20<1<10AntimonyppmASTM D51858>20<1<10AntimonyppmASTM D51858>20<1<10AntimonyppmASTM D51858<0<1<10AntimonyppmASTM D51858<0<0<1<1Antimony </th <th>SAMPLE INFORM</th> <th>IATION</th> <th>method</th> <th>limit/base</th> <th>current</th> <th>history1</th> <th>history2</th>	SAMPLE INFORM	IATION	method	limit/base	current	history1	history2
Machine Age Oil AgeyrsClient Info340Oil Age Sample StatusClient Info118Oil ChangedClient InfoNot ChangedChangedN/ASample StatusIIBNORMALABNORMALABNORMALWEAR METALSmethodInit/basecurrenthistory1history2PQASTM D8184242129IronppmASTM D8185>20000NickelppmASTM D5185>20000NickelppmASTM D5185>20000NickelppmASTM D5185>20000NationumppmASTM D5185>20000AluminumppmASTM D5185>20000LeadppmASTM D5185>20<1<11TinppmASTM D5185>20<1<10AntimonyppmASTM D5185>20<1<10AdadiumppmASTM D5185>20<1<10AdadiumppmASTM D5185>20<1<10AdadiumppmASTM D5185>20<1<10AdadiumppmASTM D5185<0000AdadiumppmASTM D5185<0001AdadiumppmASTM D51850001 </th <th>Sample Number</th> <th></th> <th>Client Info</th> <th></th> <th>PLS0000670</th> <th>PLS0000547</th> <th>PLS0000326</th>	Sample Number		Client Info		PLS0000670	PLS0000547	PLS0000326
Oil AgeyrsClient Info118Oil ChangedClient InfoNot Changed ABNORMALChanged ABNORMALN/ASample StatusClient InfoNot Changed ABNORMALN/AWEAR METALSmethodlimit/basecurrenthistory1ABNORMALPQASTM D8184242129IronppmASTM D5185m>20000NickelppmASTM D5185m>20000NickelppmASTM D5185m>20000SilverppmASTM D5185m>20000LeadppmASTM D5185m>20000CopperppmASTM D5185m>20000CadmiumppmASTM D5185m>20<1<11TinppmASTM D5185m>20<1<10AntimonyppmASTM D5185m>20<1<10VanadiumppmASTM D5185m<1<100CadmiumppmASTM D5185m<1<100ADITIVESmethodlimit/basecurrenthistory1history2BoronppmASTM D5185m000<10MagnesiumppmASTM D5185m000<10MagnesiumppmASTM D5185m000<11Magnesiumpp	Sample Date		Client Info		01 Aug 2023	14 Feb 2023	24 Feb 2021
Normal Sample StatusNot Changed Client InfoNot Changed ABNORMALN/A ABNORMALWEAR METALSmethodlimit/basecurrenthistory1history2PQASTM D8184242129IronppmASTM D5185m>20<1<12ChromiumppmASTM D5185m>200000NickelppmASTM D5185m>200000SilverppmASTM D5185m>200000SilverppmASTM D5185m>200000LeadppmASTM D5185m>200000CopperppmASTM D5185m>20<1<100AntimonyppmASTM D5185m>20<1<1000VanadiumppmASTM D5185m>20<1<1000VanadiumppmASTM D5185m0000110ADDITIVESmethodlimit/basecurrenthistory1history2A001BariumppmASTM D5185m000<100110ManganeseppmASTM D5185m000<101101101101101110111 <td< th=""><th>Machine Age</th><th>yrs</th><th>Client Info</th><th></th><th>3</th><th>4</th><th>0</th></td<>	Machine Age	yrs	Client Info		3	4	0
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WEAR METALS method limit/base current history1 history2 PQ ASTM 08184 24 21 29 Iron ppm ASTM 05185m >20 0 0 0 Nickel ppm ASTM 05185m >20 0 0 0 Nickel ppm ASTM 05185m >20 0 0 0 Silver ppm ASTM 05185m >20 0 0 0 Aluminum ppm ASTM 05185m >20 0 0 0 Lead ppm ASTM 05185m >20 <1 <1 1 Tin ppm ASTM 05185m >20 <1 <1 0 Cadmium ppm ASTM 05185m >20 <1 <1 0 Cadmium ppm ASTM 05185m >20 <1 <1 0 Cadmium ppm ASTM 05185m 0 0 0 0 0 <tr< th=""><th>Oil Changed</th><th></th><th>Client Info</th><th></th><th>Not Changd</th><th>Changed</th><th>N/A</th></tr<>	Oil Changed		Client Info		Not Changd	Changed	N/A
PQ ASTM D8184 24 21 29 Iron ppm ASTM D5185n >20 <1 <1 2 Chromium ppm ASTM D5185n >20 0 0 0 Nickel ppm ASTM D5185n >20 0 0 0 Nickel ppm ASTM D5185n >20 0 0 0 Silver ppm ASTM D5185n >20 0 <10 0 Lead ppm ASTM D5185n >20 <1 <1 1 Tin ppm ASTM D5185n >20 <1 <1 0 Antimony ppm ASTM D5185n >20 <1 <1 0 Antimony ppm ASTM D5185n >20 <1 <1 0 Cadmium ppm ASTM D5185n 0 0 0 0 0 Manganese ppm ASTM D5185n 0 0 0 <1 1 </th <th>Sample Status</th> <th></th> <th></th> <th></th> <th>ABNORMAL</th> <th>ABNORMAL</th> <th>ABNORMAL</th>	Sample Status				ABNORMAL	ABNORMAL	ABNORMAL
Iron ppm ASTM D5185m >20 <1	WEAR METALS		method	limit/base	current	history1	history2
Chromium ppm ASTM D5185m >20 0 0 0 Nickel ppm ASTM D5185m >20 0 0 0 Silver ppm ASTM D5185m 0 0 <11	PQ		ASTM D8184		24	21	29
Nickel ppm ASTM D5185m >20 0 0 0 Titanium ppm ASTM D5185m 0 0 0 0 Silver ppm ASTM D5185m >20 0 0 0 0 Aluminum ppm ASTM D5185m >20 0 0 0 0 Lead ppm ASTM D5185m >20 <1	Iron	ppm	ASTM D5185m	>20	<1	<1	2
Titanium ppm ASTM D5185m 0 0 0 Silver ppm ASTM D5185m >20 0 <1	Chromium	ppm	ASTM D5185m	>20	0	0	0
Silver ppm ASTM D5185m 0 0 <1 Aluminum ppm ASTM D5185m >20 0 <1	Nickel	ppm	ASTM D5185m	>20	0	0	0
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Barium ppm ASTM D5185m 0 0 <1	ADDITIVES		method	limit/base	current	history1	history2
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Magnesium ppm ASTM D5185m 0 0 <1 Calcium ppm ASTM D5185m 60 ▲ 6 3 ▲ 0 Phosphorus ppm ASTM D5185m 0 97 95 ▲ 87 Zinc ppm ASTM D5185m 190 ▲ 3 12 ▲ 0 Sulfur ppm ASTM D5185m 190 ▲ 3 ▲ 12 ▲ 0 Sulfur ppm ASTM D5185m 1300 ▲ 50 ▲ 27 ▲ 120 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >15 <1	Molybdenum	ppm	ASTM D5185m	0	0	0	0
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Phosphorus ppm ASTM D5185m 0 97 95 A 87 Zinc ppm ASTM D5185m 190 3 12 0 Sulfur ppm ASTM D5185m 190 50 277 120 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >15 <1 <1 <1 Sodium ppm ASTM D5185m >15 <1 <1 <1 Potassium ppm ASTM D5185m >20 0 0 0 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 0.1 0.2 0.2 Nitration Abs/cm *ASTM D7624 16.5 16.0 16.5	Magnesium	ppm	ASTM D5185m	0	0	0	<1
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SulfurppmASTM D5185m13005027120CONTAMINANTSmethodlimit/basecurrenthistory1history2SiliconppmASTM D5185m>15<1	Phosphorus	ppm	ASTM D5185m	0	97	95	A 87
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Silicon ppm ASTM D5185m >15 <1	Sulfur	ppm	ASTM D5185m	1300	6 50	2 7	1 20
Sodium ppm ASTM D5185m 1 <1	CONTAMINANTS		method	limit/base	current	history1	history2
Potassium ppm ASTM D5185m >20 0 0 0 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 0.1 0.2 0.2 Nitration Abs/cm *ASTM D7624 16.5 16.0 16.5	Silicon	ppm	ASTM D5185m	>15	<1	<1	<1
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Soot % % *ASTM D7844 0.1 0.2 0.2 Nitration Abs/cm *ASTM D7624 16.5 16.0 16.5	Potassium	ppm	ASTM D5185m	>20	0	0	0
Nitration Abs/cm *ASTM D7624 16.5 16.0 16.5	INFRA-RED		method	limit/base	current	history1	history2
	Soot %	%	*ASTM D7844		0.1	0.2	0.2
	Nitration	Abs/cm	*ASTM D7624		16.5	16.0	16.5
		100/011	ACTIVI DTOLT		10.5	10.0	10.0

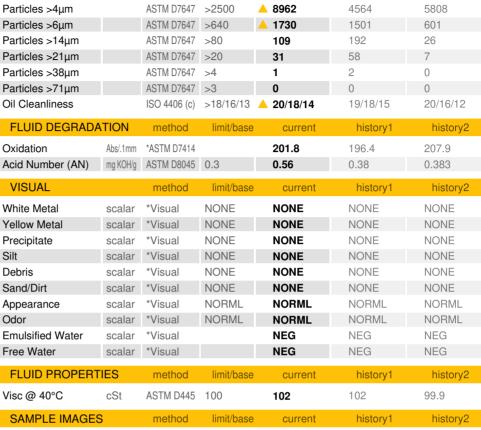


OIL ANALYSIS REPORT

FLUID CLEANLINESS



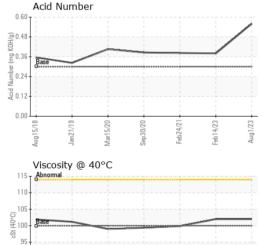


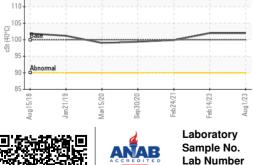


limit/base

current

method



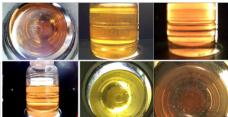


Certificate L2367



Color

Bottom



history1

history2

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Received : 25 Aug 2023 : PLS0000670 : 05935314 Diagnosed : 28 Aug 2023 Unique Number : 10620585 Diagnostician : Mike Johnson Test Package : IND 2 (Additional Tests: FT-IR, PQ, PrtCount) To discuss this sample report, contact Customer Service at 1-800-237-1369. * - Denotes test methods that are outside of the ISO 17025 scope of accreditation.

Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

Contact/Location: Shannon Ourso - HEXGEI

HEXION INC - GONZALES PLANT

shannon.ourso@hexion.com;mike.johnson@amrri.com

4338 HWY 73

GEISMAR, LA

Contact: Shannon Ourso

US 70734

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